ABSTRACT

A fuel cell stack simulator comprises an air flow field being supplied with air and exhausting the remains of the supplied air to outside after heating the supplied air and reducing the pressure of the supplied air. A fuel flow field is supplied with fuel gas and exhausts the remains of the supplied fuel gas to the outside after heating the supplied fuel gas and reducing the pressure of the supplied fuel gas. A coolant flow field is supplied with coolant and exhausts the supplied coolant to outside after heating the supplied coolant and reducing the pressure of the coolant. A moisture-supplying field supplies moisture into the fuel cell stack simulator. An air-consuming field is connected to the air-supplying field and derives a portion of the air heated air with reduced pressure. A fuel-gas-consuming field is connected to the fuel-gas-supplying field and derives a portion of the heated fuel gas with reduced pressure.